

2012 - Summer Guide to Waterton-Glacier International Peace Park Glacier National Park Visitor Guide included inside

### Waterton and Glacier Working Toward Protecting Dark Skies

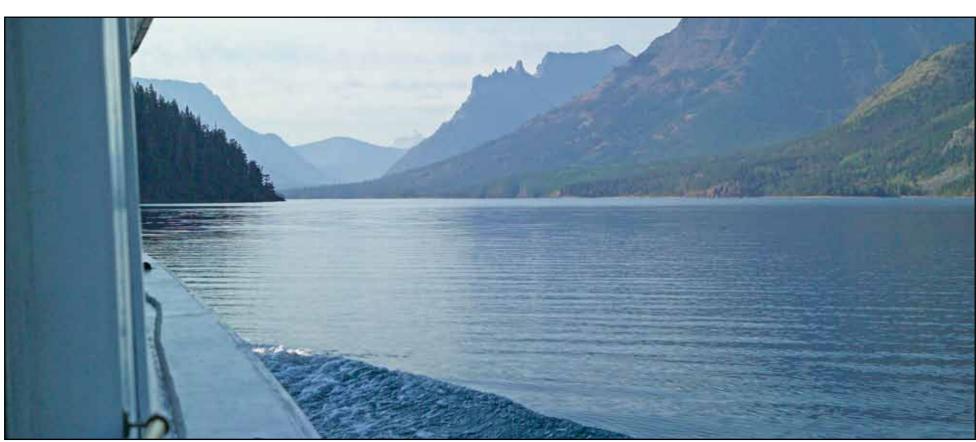
Waterton Lakes National Park in Canada and Glacier National Park in the United States already share a boundary and three joint international designations – International Peace Park, Biosphere Reserve, and World Heritage Site. Now the two parks are working on a fourth designation – International Dark Sky Park/Preserve. This joint effort recognizes the very dark skies found at the two parks and makes a commitment to protecting and preserving these high quality conditions.

If successful, this designation will be the first multi-national dark sky preserve and will be given in conjunction and with the approval of two organizations – the International Dark Sky Associa-

tion (IDA) and the Royal Astronomical Society of Canada (RASC). The nomination process requires a long-term commitment to preserving dark skies and requires the parks to meet specific objectives. These include preservation or restoration of outstanding night skies, protection of nocturnal habitat, public enjoyment of the night sky and its heritage, and demonstrating environmental leadership on dark sky issues by communicating the importance of dark skies to the general public and surrounding communities, and by providing an example of what is possible.

Dark night skies are environments undisturbed by light and air pollution.

Dark night skies have natural, cultural, and scenic importance. Wildlife is impacted by light pollution because animals often depend on darkness in order to hunt, conceal their location, navigate, or reproduce. For nocturnal animals, light pollution also means habitat disruption. Additionally, many species have far more sensitive vision than humans. Plants are affected by artificial light because it disrupts their natural cycles. Dark night skies are also culturally important because they are a resource common to all cultures on Earth, and are a metaphor for countless myths and religions. They have inspired innumerable works of art, literature, and connections to the cosmos. Natural lightscapes, including dark night skies, are a scenic resource integral to many people's Waterton-Glacier experience. Currently, two-thirds of Americans cannot see the Milky Way from their backyard, and if current light pollution trends continue, there will be almost no dark skies left in the contiguous United States by 2025. Many people seek national parks to experience this vanishing resource. Waterton-Glacier hopes to provide and preserve this important opportunity by meeting the requirements and objectives of Dark Sky Parks.



Waterton Lake is a classic example of the large glacially carved lakes found throughout the International Peace Park - David Restivo

### **Aquatic Invasive Species Threaten Park Waters!**

Waterton-Glacier International Peace Park is dominated by large fjord-like glacial lakes. For many visitors they are a primary destination. Boating, fishing, or just plain hanging out on the shore and skipping rocks consume many a relaxing hour and are the stuff of magical memories. We need your help to keep it that way.

On the surface things look fine, but in the past stocking of non-native fish changed the ecosystems of most park lakes. These fish out compete native species for food and habitat. We need to prevent additional non-native species of animals or plants from accidentally being introduced, because each small change effects the overall health of park waters.

Now there is a new and serious threat. Imagine a future where going to your favorite rock-skipping beach, you find the shoreline matted with tens of thousands of small mussel shells, with everything cemented together in a sharp, smelly mess. Imagine once productive fisheries wiped out by these new invaders. It's not science fiction, impacts are already occurring in waters

in the Great Lakes, eastern provinces and states, the prairies and plains, and more recently in the southwest United States.

Since the 1980's freshwater zebra and quagga mussels have steadily advanced westward, presumably transported on trailered boats. In February of this year a mussel-carrying boat was intercepted at a marina on Flathead Lake. The boat had come from the southwest. Flathead Lake is just downstream from Glacier.

Protecting the waters of the Peace Park requires immediate action, both by the

parks and by every boater. This summer Glacier and Waterton Lakes National Parks will step up their boat inspection and permit program. A permit to launch a boat in either park is mandatory. The regulations specific to each park are slightly different.

Regulations on obtaining a mandatory boating permit, specific to Glacier or Waterton Lakes National Park, are listed on the back page of this paper.

It is imperative that all boaters comply with these regulations.

### **World's First International Peace Park**

In 1932, Waterton Lakes National Park and Glacier National Park were officially joined together as Waterton-Glacier International Peace Park. The Peace Park celebrates the peace and goodwill existing along the world's longest undefended border, as well as a spirit of cooperation which is reflected in wildlife and vegetation management, search and rescue programs, and joint interpretive programs, brochures, and exhibits.

Waterton-Glacier International Peace Park became a World Heritage Site in 1995 for its scenic values, its significant climate, landforms and ecological processes, and abundant diversity of wildlife and wildflowers.



The International Peace Pavilion at Goat Haunt - David Restivo

### International Peace Park Hike

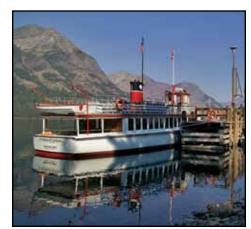
Join us in celebrating our 79th year of friendship and cooperative management by participating in an International Peace Park Hike. These special hikes are held every Wednesday and Saturday, beginning June 30, and throughout July and August. Starting at 10 a.m. from the Bertha Lake trailhead in Waterton Lakes National Park, this 13 km (8 mi) hike along Upper Waterton Lake is jointly led by a Glacier Park Ranger and a Waterton Park Interpreter. Learn about Waterton-Glacier's three international designations and take part in a peace & friendship ceremony as you cross the International Boundary on your way to Goat Haunt in Glacier National Park, Montana. Return to Waterton via boat.

A fee is charged for the return boat trip and advance reservations are recommended. The boat will have you back to the dock in Waterton by 6:30 p.m. Each hike is limited to 35 people, so you must pre-register at either the visitor Centre in Waterton (403-859-5133) or at the St. Mary visitor Center (406-732-7750) in Glacier. Reservations are only accepted for the next scheduled hike (open on Saturday for Wednesday hikes; open on Wednesday for Saturday hikes).

Come prepared with a lunch, water, rain gear, jacket, hat. Wear sturdy footwear. The trail is not difficult, but you will be hiking most of the day. Bring money for the boat. Pets are not permitted.



"Hands across the border" ceremony - Jeff Yee



The International - David Restivo

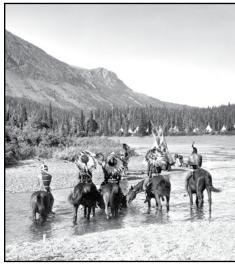
### Discover Our Neighbors' Cultural Heritage

This area holds special appeal for visitors interested in the culture of indigenous peoples. Waterton-Glacier International Peace Park lies just west of the Kainai and Piikani Reserves in Canada and borders the Blackfeet Reservation in the United States. People of the Confederated Salish and Kootenai Tribes, southwest of the park, also have a close association with the park. Take the time to learn about our neighbors.

Nearby in Browning, Montana, the Museum of the Plains Indian features fascinating exhibits and Native American handcrafts as sales items. The museum is open daily from June through September. Also in Browning, North American Indian Days, the second weekend in July, is a large celebration of Native American culture that includes a parade, traditional dress, and dancing. Visitors are always welcome.

Northeast of Waterton, early plains culture is dramatically displayed at Head-Smashed-In Buffalo Jump World Heritage Site. This site is open seven days a week in summer. Phone 403-553-2731 for further information.

The People's Center and Native Ed-Ventures, for the preservation of Kootenai and Salish Culture, are located near Pablo, Montana. The Center provides educational opportunities, full-day and half-day interpretive tours of the Flathead Indian Reservation, a museum collection, and gift shop. Open daily throughout the summer. Call 406-883-5344 or 406-675-0160 for further information.



Blackfeet at Two Medicine - R. E. Marble

### Akamina-Kishinena Provincial Park



Fireweed - David Restivo

Akamina Kishinena Provincial Park is located in the southeast corner of the British Columbia and borders both Waterton Lakes and Glacier National Parks. High spacious alpine ridges, deep secluded valleys and windswept passes provide habitat and connectivity to the last self-sustaining grizzly bear population in the United States. Exposed alpine ridges, southern latitude and southern exposure provide winter range for goats and big horn sheep.

The trails and passes of the Akamina-Kishinena used today to cross the axis of the continent, were established and used for many years by the early people's and wildlife travelling between the Flathead Basin and the abundant Great Plains.

Akamina Kishinena is a wilderness area, without supplies or equipment of any kind. All arrangements for supplies and transportation must be made beforehand.

### Accessibility

The Apgar and St. Mary Visitor Centers, the International Peace Park Pavilion, and the Cameron Lake Day Use Area are wheel-chair accessible. A listing of additional facilities and services, accessible to visitors with special needs, is available at visitor centers and entrance stations throughout Waterton-Glacier International Peace Park.

Interpretive programs in Glacier National Park accessible by wheelchair are highlighted in the park's rangerguided activity guide, available throughout Glacier.

Wheelchair accessible trails include the Trail of the Cedars and the Running Eagle Falls Nature Trails in Glacier, and the Linnet Lake, Kootenai Brown, and Townsite trails in Waterton Lakes.

Visitors sensitive to altitude should be aware of the following park elevations: Lake McDonald 3150 ft. Logan Pass 6640 ft. 2024m 4900 ft. Many Glacier 1494m Polebridge 3600 ft. 1097m St. Mary Lake 4500 ft. 1372m Two Medicine 5150 ft. 1570m 4200 ft. Waterton 1280m



Accessible boardwalk on the Trail of the Cedars - David Restivo



Parks Canada **Parcs** Canada



The Waterton-Glacier Guide is a joint publication between Waterton Lakes National Park of Canada & Glacier National Park in the United States.

The Milky Way illuminates the St. Mary Valley with starshine. - Photo by Wally Pacholka/AstroPics.com

# Half the Park Happens After Dark

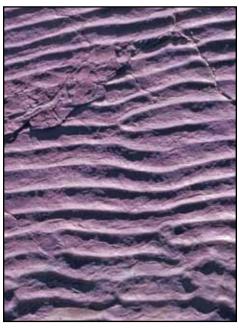
VISITORS COME TO GLACIER NATIONAL PARK FOR THE spectacular scenery, a drive across Going-to-the-Sun Road, or an opportunity to see wildlife like mountain goats and grizzly bears. Most of these experiences happen during the day time, but there is an equally amazing part of Glacier that can be seen only after the sun has set - the night time sky. Glacier has some of the darkest skies around and is an ideal place for viewing many celestial wonders.

The parks educational program, Half the Park Happens After Dark, provides participants with an opportunity to see the night sky in all its glory – and in a location where a minimal number of artificial lights do not impact the pristine darkness over the park. The National Park Service has collaborated with several partners - the National Park Foundation, the Glacier Association, the Glacier National Park Fund, the International Dark Sky Association, the NPS Night Sky Program, and the Big Sky Astronomy Club – to provide park-wide night time viewing as well as daytime viewing of the sun. The park hosts several dedicated volunteer astronomers to provide these interpretive viewing opportunities at St. Mary, Apgar, and Logan Pass. The programs include laser-guided constellation tours as well as telescope viewing of deep space objects like galaxies, star clusters, and nebulae.

Solar-viewing has been equally popular with many visitors seeing our nearest star for the first time through special hydrogen-alpha filtered telescopes. Check at park visitor centers or in the publication, Ranger-Led Activities, for program locations and times.

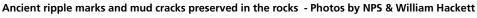


Observing Glacier's Sky - Photo by Mark Wagner



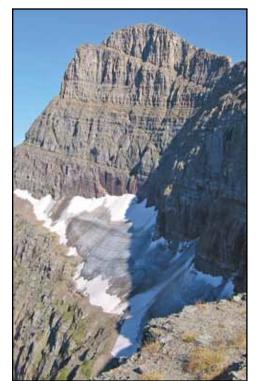








Mt Wilbur is a classic glacial horn; carved by glaciers on all sides - Photo by David Restivo



Cirque on Mt. Kipp - Photo by David Restivo

# The Rocks Make the View

Glacier National Park is widely known for its stunning vistas and rugged beauty. While the glaciers in the park are smaller than they once were, the dramatic landscapes seen throughout the area have been sculpted over thousands of years by what was once much thicker ice. The impressive views looking over long lakes into the mountains such as Lake McDonald, Bowman Lake, and St. Mary were made possible by glacial ice having plowed over the landscape leaving behind the long, straight, U-shaped valleys with jagged cliffs overhead.

The geology of Glacier National Park is as memorable as the views themselves, with most of the rocks exposed in the park being more than 1 billion years old. These ancient rocks were formed at a time when

this part of the world was unbearably hot and humid, with shallow mud flats covering much of the landscape. If you look closely, ripple marks, mud cracks, and even raindrop impressions are visible in the unmistakable bright green and barn red mudstones of the Appekunny and Grinnell formations. On a drive along the Going to the Sun Road these beautiful rock formations should not be missed in the roadside outcrops and cliffs.

In the Siyeh Formation, a gray limestone seen in cliffs towering above the road, fossils of some of the earliest forms of life on earth are found. Called Stromatolites, these fossils look like heads of cabbage preserved in the rock. These stromatolites were mounds of blue-green algae buried by sediment in shallow water and pre-

served in the rock (modern examples can be seen growing today in the bays along the Australian shore). Driving towards Many Glacier, the edge of these jagged older rocks is seen in dramatic views with an abrupt end to the rocks seen throughout the park. Beyond this fault, which marks where older hard rock slid over younger soft rock, the landscape looks strikingly different. Soft, eroded rocks that are over 65 million years old make up the rolling hills seen east of the park.

As you drive and hike through the park, remember to appreciate the stunning landscape and to keep an eye out for the beautiful geologic features that illustrate clues as to what the earth was like long ago.

# Enjoy Glacier Up-Close on a Nature Trail



Running Eagle Falls - Photo by Bill Hayden

Glacier is a hiker's paradise. Over 700 miles of trails lead visitors through some of the most spectacular and wild country in the Rockies. Multi-day trips make for lifetime memories, but so can a shorter hike on one of Glacier's seven nature trails. The ecosystems traversed by these short walks convey a sense of the magnitude and scope of Glacier's diversity.

Two trails explore the recent effects of fire on the landscape. The Forest and Fire Nature Trail winds through an area that burned in both 1967 and then again in 2001. The Rocky Point Nature Trail shows the effects of one of the park's most recent fires from 2003.

Native American culture is the focus of the wheelchair accessible Running Eagle Falls Nature Trail in the Two Medicine Valley. Traditional uses of medicinal plants are explained against the backdrop of the story of Pitamakan (*Running Eagle*), an important Blackfeet woman warrior.

Towering cedar trees along the wheelchair accessible Trail of the Cedars Nature Trail dwarf visitors and create a dark and moist environment filled with shade-loving ferns. The area can be very crowded at mid-day. From the halfway point of the trail, a 2-mile spur leads to Avalanche Lake.

The Hidden Lake Nature Trail leads visitors to an alpine wonderland. Snow lingers well into summer followed by carpets of subalpine flowers. The view of Hidden Lake is unforgettable. Visit late in the day or early in the morning for the best lighting conditions and to avoid the crowds. Watch for mountain goats along the trail.

The Sun Point Nature Trail traverses the windblown slopes above St. Mary Lake and offers spectacular views of the Continental Divide in the distance and the sparkling lake below. Hikers can also link the nature trail to the trails to St. Mary and Virginia Falls, making for a great half-day hike along the shores and forests surrounding St. Mary Lake.

Finally, the Swiftcurrent Nature Trail around Swiftcurrent Lake in the Many Glacier Valley blends Glacier's geologic past with its human history. The dramatic views of the glacially carved slopes towering above the Many Glacier Hotel are the classic image of Glacier National Park for thousands of former visitors to this amazing part of the Rocky Mountains.



Trail of the Cedars - Photo by David Restivo



Camas - Photo by Bill Hayden

#### Pets

Pets are allowed in developed areas, front-country campsites and picnic areas, along roads, and in boats on lakes where motorized watercraft are permitted. Pets must be on a leash no longer than six feet, under physical restraint or caged at all times, including while in open-bed pickup trucks. Pets are not to be left tied to an object when unattended. Pet owners must pick up after their pets and dispose of waste in a trash receptacle. Owners must not allow a pet to make noise that is unreasonable.

# Off the Beaten Path

#### MANY GLACIER

This area in the northeastern corner of the park is often referred to as the heart of Glacier. Boat rides, horseback riding, and great hiking are all found here. Three excellent all-day hikes are the Iceberg Lake, Cracker Lake, and Grinnell Glacier trails. Roughly 10-12 miles round-trip, these moderately strenuous hikes bring visitors to unmatched subalpine scenery.

For shorter hikes, Grinnell Lake, Red Rock Falls, and the Swiftcurrent Nature Trail are good choices. Guided boat trips and horseback riding are also available.



Mt. Gould - Photo by David Restivo

#### THE NORTH FORK

If you have a high clearance vehicle you might enjoy a trip to the northwest corner of Glacier, but expect rough and dusty roads. The Inside North Fork Road has several narrow sections that make passing oncoming traffic a challenge. Allow all day for the drive to beautiful Kintla and Bowman Lakes. The Bowman and Kintla Lakes campgrounds are north of the Polebridge Ranger Stationa and two small primitive campgrounds are south of the ranger station at Logging and Quartz Creeks. The only services in this area are offered outside the park in Polebridge.



Kintla Lake - Photo by David Restivo

#### **TWO MEDICINE**

Most visitors miss Two Medicine. Those who find it, are rewarded with some of the best scenic hiking to be found. Trails to Scenic Point, Cobalt Lake, Aster Park, and Old Man Lake are all excellent. Guided boat trips on Two Medicine Lake make No Name Lake, Upper Two Medicine Lake, and Twin Falls easy family trips.

Don't miss Running Eagle Falls. Site of a wheelchair-accessible nature trail, this area highlights Native American use of plants, and the spiritual importance of this site to the neighboring Blackfeet Tribe.



Pray Lake - Photo by David Restivo

#### **Visitor Information**

# Entrance Fees Single Vehicle Pass ......\$25.00 Valid for 7 days. Single Person Entry ......\$12.00 By foot, bicycle, or motorcycle for 7 days. Glacier National Park Pass .......\$35.00 Valid for one year from month of purchase.

America the Beautiful National Parks and Federal Recreational Lands Annual Pass ...... \$80.00

Special fees are charged for commercial tour vehicles.

Waterton Lakes National Park has separate entrance fees.

#### Visitor Information Hours

Apgar visitor Center	
May 1 - June 16	9:00am to 5:00pm
June 17 - Sept. 3	8:00am to 6:00pm
Sept. 4 - Sept. 30	8:00am to 5:00pm
Oct. 1 - Oct. 19	9:00am to 4:30pm

#### St. Mary Visitor Center

May 25 - June 16	8:00am to 5:00pm
June 17 - Sept. 3	8:00am to 9:00pm
Sept. 4 - Sept. 30	8:00am to 5:00pm

### Many Glacier Ranger Station May 27 - Sept. 21

May 27 - Sept. 21 ......7:00am to 5:00pm

#### Two Medicine Ranger Station

May 27 - Sept. 21 ......7:00am to 5:00pm

#### Logan Pass Visitor Center

If the Going-to-the-Sun Road opens prior to June 17 the Logan Pass Visitor Center will be open 9:30am to 4:30pm.

June 17 - Sept. 3.......9:00am to 7:00pm Sept. 4 - Sept. 30......9:30am to 4:30pm

#### Backpacking & Backcountry Permits

Backcountry camping in Glacier requires a backcountry permit at a cost of \$5 per person per night and are issued no more than 24 hours in advance. Permit stations are located at:

#### Apgar Backcountry Permit Center

May 27 - Sept. 21 ......7:00am to 4:30pm Many Glacier Ranger Station

May 27 - Sept. 21 ......7:00am to 4:30pm Two Medicine Ranger Station

May 27 - Sept. 21 .............7:00am to 4:30pm
Polebridge Entrance Station

May 26 - Sept. 8 ......8:00am to 4:00pm

Some stations may be closed for lunch hour

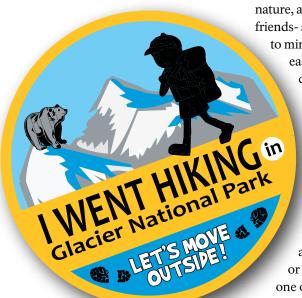
Visitors entering the backcountry at Goat Haunt or Chief Mountain trailheads may obtain their permit at the Waterton Visitor Centre (credit cards only).



Mountain Goat - Photo by David Restivo

# Hey Junior Rangers! Earn an "I Went Hiking in Glacier" Sticker in 2012

Thanks to a private donation to our Junior Ranger Program children who complete a hike, in addition to doing all the other required activities in the Glacier Junior Ranger booklet, will receive our new "Let's Move" sticker along with their Junior Ranger badge.



Glacier National Park is joining with First Lady Michelle Obama's nationwide Let's Move campaign to encourage children to get active. The benefits of hiking in Glacier go far beyond getting exercise - spectacular scenery, wildlife viewing, beautiful wildflowers, connecting with nature, and quality time with family and friends- are some that immediately come to mind. However, it's not always that

> easy to hike with children – safety concerns, fickle weather, physical limitations, not knowing the trail, and time constraints- can all become good excuses for staying inside.

The good news is that Glacier has over 760 miles of trail and there are many family friendly options for children of all abilities. For younger children or beginning hikers, start small with one of our level and paved nature trails. For children and families who want

more of a challenge, see our Day Hikes in Glacier newspaper for additional longer and steeper hikes. Make sure you are familiar with our Bear Safety guidelines and check the weather before you go. If you're still not sure you want to brave it on your own, join one of our Ranger-led hikes suitable for families and children. A schedule can be found in the Ranger-led Activity Guide.

Children who become Glacier Junior Rangers learn about the significant reasons this area was designated a national park. Now along with sharing that knowledge, we hope they will talk about their hiking accomplishment with friends and family and encourage others to get outside and stay active. They'll be part of a new generation of Let's Move Outside Junior Rangers.

#### **Park Regulations**

It is your responsibility to know and respect park regulations. Violations are punishable by fines up to \$500.00 and/ or six months in jail. Park regulations are strictly enforced.

- Pets must be on a leash, and are not permitted on trails or anywhere off maintained roadways.
- Feeding or disturbing any wildlife is prohibited.
- It is illegal to remove any natural or cultural features including plants, rocks, mushrooms, artifacts, driftwood, or antlers
- Open containers of alcohol in a motor vehicle are prohibited.
- All food and utensils must be properly stored to protect wildlife.
- · Hunting, and recreational use of firearms, is not allowed in Glacier.
- The park fishing season is from the third Saturday in May through November 30. Obtain Glacier's current Fishing Regulations prior to fishing.
- Park rangers strictly enforce park speed limits by radar and randomly conduct DUI sobriety checkpoints throughout the park.

#### What About Firearms?

Federal law allows people (who can legally possess firearms under applicable federal, state, and local laws) to legally possess firearms in this park.

It is the responsibility of visitors to understand and comply with all applicable state, local, and federal firearms laws before entering this park. Hunting, and recreational use of firearms, is prohibited.

Federal law also prohibits firearms in certain facilities in this park; those places are marked with signs at all public entrances.

# Visit our Neighbor to the South

### Grant Kohrs Ranch National Historic Site

If you're heading down Interstate 90 to Yellowstone National Park after you leave Glacier, we've got good news. You only need to travel half the distance before you can answer the perennial question, "Are we there yet?" with a resounding, "Yes!" Halfway between the two parks, the freeway passes within half a mile of Grant-Kohrs Ranch National Historic Site. A five minute walk from the Visitor Center will take you back a century and a half, to the

very beginnings of the open range cattle era. Nearly 90 historic buildings, horses, cattle, chickens, ranger led programs, a Chuckwagon, and demonstrations await.

There is no entrance fee, and (critical to any leg-stretch stop) there are accessible rest rooms. The ranch is open daily, yearround. Summer hours: 9:00am to 5:30pm Visit www.nps.gov/grko or phone (406) 846-2070 for information.



Family Fun at Grant Kohrs Ranch - NPS photo

#### **Camping Information**

Camping is permitted only in designated campgrounds. Campgrounds, except Fish Creek and St. Mary, are available on a "first-come, firstserved" basis. Utility hookups are not provided

#### **Group Campsites**

Ten group sites at Apgar, two at St. Mary, and one each at Many Glacier and Two Medicine, accommodate 9-24 people. The fee is \$50.00 per night for the first 9 campers. For each additional person (up to the limit of 24 campers), there is a \$5.00 nightly fee. During reservation season, five group campsites at Apgar and two at St. Mary may be reserved. Additional reservation fees apply. Reservations may be made through the National Park Service Reservation Service. Contact www.recreation. gov or call 1-877-444-6777.

#### **Campfires**

Campfires are permitted only in designated campgrounds and picnic areas where grates are provided. Collecting firewood is prohibited except along the Inside North Fork Road from Dutch Creek to Kintla Lake and along the Bowman Lake Road. Only dead and down wood may be collected.

#### **Hiker-Biker Campsites**

Campsites for bicyclists and hikers are shared sites holding up to eight people. The fee is \$5.00 per person. The hiker-biker site at St. Mary is \$8.00 per person.

Campground	First Night	Last Night	Fee	Sites	Flush Toilets	Dump Station	Hiker- Biker	For Larger RV's and Additional Information
Apgar	May 4	Oct. 7	\$20.00	192	Yes	Yes	Yes	The largest 25 sites have a maximum parking space of 40'. Primitive camping Oct. 8 to Oct. 31.
Avalanche	June 8	Sept. 2	\$20.00	86	Yes		Yes	The largest 50 sites have a maximum parking space of 26'.
Bowman Lake	May 25	Sept. 9	\$15.00	48				Accessible only by dirt road, large units not recommended. Primitive camping Sept. 10 until closed by weather.
Cut Bank	June 8	Sept. 2	\$10.00	14				Accessible only by dirt road, large units not recommended. Primitive camping only.
Fish Creek *	June 1	Sept. 2	\$23.00	178	Yes	Yes		The largest 18 sites have a maximum parking space of 35'. 62 additional sites will accommodate up to 27'.
Kintla Lake	May 25	Sept. 9	\$15.00	13				Accessible only by dirt road, large units not recommended. Primitive camping Sept. 10 until closed by weather.
Logging Creek	July 1	Sept. 23	\$10.00	7				Accessible only by dirt road, large units not recommended. Primitive camping only, weather permitting.
Many Glacier	May 25	Sept. 16	\$20.00	109	Yes	Yes	Yes	The largest 13 sites have a maximum parking space of 35'. Primitive camping Sept. 17 to Oct. 30 weather permitting.
Quartz Creek	July 1	Oct. 30	\$10.00	7				Accessible only by dirt road, large units not recommended. Primitive camping only, weather permitting.
Rising Sun	May 25	Sept. 9	\$20.00	83	Yes	Yes	Yes	The largest 10 sites have a maximum parking space of 25'.
Sprague Creek	May 11	Sept. 9	\$20.00	25	Yes		Yes	No towed units Some sites have a maximum parking space of 21'.
St. Mary *	May 27	Sept. 16	\$23.00	148	Yes	Yes	Yes	The largest 25 sites have a maximum parking space of 35'. Primitive camping April 1 to May 26 & Sept. 17 to Oct. 31.
Two Medicine	May 25	Sept. 16	\$20.00	99	Yes	Yes	Yes	The largest 13 sites have a maximum parking space of 32'. Primitive camping Sept. 17 to Oct. 30 weather permitting.

Camping is permitted only in designated campgrounds. Campgrounds in primitive status have no water available. \* Fish Creek and St. Mary may be reserved through the National Recreation Reservation Service from June 1 through Sept. 5.

Call 1-877-444-6777 or visit www.recreation.gov for reservation information.

# Hiking in Bear Country

#### DON'T SURPRISE BEARS

Bears will usually move out of the way if they hear people approaching, so make noise. Most bells are not enough. Calling out and clapping hands loudly at regular intervals are better ways to make your presence known. Hiking quietly endangers you, the bear, and other hikers.

A bear constantly surprised by quiet hikers may become habituated to close human contact and less likely to avoid people. Don't be tempted to approach or get too close to these bears.

#### **DON'T MAKE ASSUMPTIONS!**

You can't predict when and where bears might be encountered along a trail. People often assume they don't have to make noise while hiking on a well-used trail. Some of the most frequently used trails in the park are surrounded by excellent bear habitat. People have been charged and injured by bears fleeing from silent hikers who unwittingly surprised them along the trail. Even if other hikers haven't seen bears along a trail section recently, don't assume that bears aren't there.

Don't assume a bear's hearing is any better than your own. Some trail conditions make it hard for bears to see, hear, or

smell approaching hikers. Be particularly careful by streams, against the wind, or in dense vegetation. A blind corner or a rise in the trail also requires special attention.

#### DON'T APPROACH BEARS!

Bears spend a lot of time eating, so be extra cautious when passing through obvious feeding areas like berry patches, cow parsnip thickets, or fields of glacier lilies. Take the time to learn what these foods look like.

Keep children close by. Hike in groups and avoid hiking early in the morning, late in the day, or after dark.

Never intentionally get close to a bear. Individual bears have their own personal space requirements, which vary depending on their mood. Each will react differently and its behavior can't be predicted. All bears are dangerous and should be respected equally.

Make noise when hiking! Hiking quietly endangers you, the bear, and other hikers.

#### If You Encounter a Bear

#### What Do I Do if I Run Into a Bear?

A commonly asked question is "What do I do if I run into a bear?" There is no easy answer. Like people, bears react differently to each situation. The best thing you can do is to make sure you have read all the suggestions for hiking and camping in bear country and follow them. Avoid encounters by being alert and making noise.

Bears may appear tolerant of people and then attack without warning. A bear's body language can help determine its mood. In general, bears show agitation by swaying their heads, huffing, and clacking their teeth. Lowered head and laid-back ears also indicate aggression. Bears may stand on their hind legs or approach to get a better view, but these actions are not necessarily signs of aggression. The bear may not have identified you as a person and is unable to smell or hear you from a distance.

#### **Bear Attacks**

The vast majority of bear attacks have occurred because people have surprised a bear. In this type of situation the bear may attack as a defensive maneuver.

In rare cases, bears have attacked at night or after stalking people. These types of attacks are very serious because it may mean the bear is looking at you as prey. If you are attacked at night or if you feel you have been stalked and attacked as prey, try to escape. If you cannot escape or if the bear follows, use bear spray, or shout and try to intimidate the bear with a branch or rock. Do whatever it takes to let the bear know you are not easy prey.

#### If you surprise a bear

- Stop and assess the situation. Is it a black bear or grizzly bear? Does it have cubs? Is it aware of your presence?
- If the bear appears unconcerned or unaware of your presence, take this opportunity to quietly leave the area. Do not run! Back away slowly, but stop if it seems to agitate the bear.
- If the bear approaches or charges you, stop. Stand your ground. Speak to it in a calm voice.
- If it's a grizzly and is about to make contact, play dead. Lie on the ground on your stomach and cover your neck with your hands.
- If a bear attacks and you have bear spray,
- Most attacks end quickly. Do not move until the bear has left the area.
- If it's a black bear fight back. Defensive attacks by black bears are very rare.

# Carry Bear Spray But Know How to Use it

This aerosol pepper derivative triggers temporarily incapacitating discomfort in bears. It is a non-toxic and non-lethal means of deterring aggressive bears. Bear spray has proven to be effective for fending off threatening and attacking bears, and for preventing injury to the person and the animal involved.

Bear spray is intended to be sprayed towards an oncoming bear in an expanding cloud. It does not have to be aimed at the bears face and can be fired from the hip. Be sure to remove the zip-tie securing the safety clip before heading out on the trail. Bear spray is not intended to act as a repellent. Do not spray gear or your camp with bear spray. Under no

circumstances should bear spray create a false sense of security or serve as a substitute for standard safety precautions in bear country. Environmental factors, including strong wind and heavy rain, can reduce the effectiveness of bear spray.

Canadian Customs will allow the importation of bear spray into Canada, if it is in a container that specifically states it for use on animals.



Don't help teach bears bad habits. Never leave gear unattended. - Photo by Terry Dossey

#### **For Your Safety**

#### Drowning

People are often surprised to find out that drowning is the number one cause of fatalities in Glacier. Please use extreme caution near water. Swift, cold glacial streams and rivers, moss-covered rocks, and slippery logs all present dangers. Children, photographers, boaters, rafters, swimmers, and fishermen have fallen victim to these rapid, frigid streams and deep glacial lakes. Avoid wading in or fording swift streams. Never walk, play, or climb on slippery rocks and logs, especially around waterfalls. When boating, don't stand up or lean over the side, and always wear a life jacket.

Sudden immersion in cold water (below 80° F) may trigger the "mammalian diving reflex." This reflex restricts blood from outlying areas of the body and routes it to vital organs like the heart, lungs, and brain. The colder the water, the younger the victim, and the quicker the rescue, the better the chance for survival. Some coldwater drowning victims have survived with no brain damage after being submerged for over 30 minutes.

#### Drowning Revival Procedure:

- Retrieve victim from water without endangering yourself.
- Prevent further body heat loss, but do not rewarm.
- Near-drowning victims may look dead. Don't let this stop you from trying to revive them! If there is no pulse, start CPR regardless of the duration of submersion.
- Delayed symptoms may occur within 24 hours. Victims must be evaluated by a physician.

#### Hypothermia

Hypothermia, the "progressive physical collapse and reduced mental capacity resulting from the chilling of the inner core of the human body," can occur even at temperatures above freezing. Temperatures can drop rapidly. Sudden mountain storms can turn a pleasant hike into a drenching, bitterly cold and life-threatening experience. People in poor physical condition or who are exhausted are particularly at risk.

#### Prevention

- Avoid hypothermia by using water-resistant clothing before you become wet.
- Wear clothing that wicks moisture away.
- Minimize wind exposure and if your clothes become wet, replace them.
- Avoid sweating by dressing in layers, rather than in a single bulky garment.
  Pack a sweater, warm hat, and rain gear for
- Pack a sweater, warm hat, and rain gear for any hike.

#### Warning Signs

 Uncontrolled shivering, slow or slurred speech, memory lapses and incoherence, lack of coordination such as immobile or fumbling hands, stumbling, a lurching gait, drowsiness, and exhaustion.

#### Immediate Treatment

- Seek shelter from weather and get the victim into dry clothes.
- Give warm non-alcoholic drinks.
- Build a fire and keep victim awake.
- Strip victim and yourself, and get into sleeping bag making skin-to-skin contact.
- If victim is semi-conscious or worse, get professional help immediately.

#### Giardia

Giardiasis is caused by a parasite (*Giardia lamblia*) found in lakes and streams. Persistent, severe diarrhea, abdominal cramps, and nausea are the symptoms of this disease. If you experience any symptoms, contact a physician. When hiking, carry water from one of the park's treated water systems. If you plan to camp in the backcountry, follow recommendations received with your permit. Bring water to a boil or use an approved filter.

#### **Mountainous Terrain**

Falls and accidents can occur after stepping off trails or roadsides, or by venturing onto very steep slopes. Stay on designated trails and don't go beyond protective fencing or guard rails. Supervise children closely in such areas. At upper elevations, trails should be followed carefully.

#### Snow and Ice

Snowfields and glaciers present serious hazards. Concealed crevasses on glaciers or hidden cavities below snowfields may collapse when stepped on. Don't slide on snowbanks. People often lose control and slide into rocks or trees. Exercise caution around any snowfield.

#### What Kind of Bear is That?

**Grizzly Bear** 

**Color** Range from blond to nearly black, sometimes with silver-tipped guard hairs that give

them a "grizzled" appearance.

**Physical Features** Grizzly bears often have a dished-in face and a large hump of heavy muscle above the shoulders. Their claws are about 4 inches (10 cm) long.

**Black Bear** 

Color

Color is not a reliable indicator of species. Contrary to their name black bears also

come in brown, cinnamon, and blond.

Physical Features

Black bears have a facial profile that is straighter from tip of nose to ears, than the grizzly and lack the dished-in look that grizzlies have. The also lack the shoulder hump of a grizzly and have shorter claws, generally around 1½ inches (4 cm) long.



Bears that obtain human food may have to be destroyed. Don't leave any food, packs, or garbage unattended, even for a few minutes.



Bear proof can and inquisitive bear - NPS Photo

A fed bear... is a dead bear!

Please help ensure that all food and garbage are stored out of reach of bears at all times.

# Roadside Bears

It's exciting to see bears up close, but we must act responsibly to keep them wild and healthy. If you see a bear along the road, please do not stop. Stopping and watching roadside bears will likely start a "bear jam" as other motorists follow your lead. "Bear jams" are hazardous to both people and bears as visibility is reduced and bears may feel threatened by the congestion. Roadside bears quickly become habituated to vehicles and people, increasing their

chances of being hit by motor vehicles. Habituated bears may learn that it is acceptable to frequent campgrounds or picnic areas, where they may gain access to human food. When a bear obtains human food, a very dangerous situation is created that may lead to human injury and the bear's death. Please resist the temptation to stop and get close to roadside bears – put bears first at Glacier National Park.



Odors attract bears. Our campground and developed areas can remain "unattractive" to bears if each visitor manages food and trash properly. Regulations require that all edibles (including pet food), food containers (empty or not), and cookware (clean or not) be stored in a hard-sided vehicle or food locker when not in use, day or night.

- Keep a clean camp! Improperly stored or unattended food will likely result in confiscation of items and/or issuance of a Violation Notice.
- Inspect campsites for bear sign and for careless campers nearby. Please notify a park ranger of any potential problems that you may notice.
- Place all trash in bear proof containers.
- Pets, especially dogs, must be kept under physical restraint.
- Report all bear sightings to the nearest ranger or warden immediately.

For your safety, and for the safety of bears, always stay at least 100 yards (1 football field) away from any bear. Use a telephoto lens for photography.



Brown colored black bear - Photo by Bill Hayden



Grizzly family - Photo by Terry Dossey

#### **For Your Safety**

#### Wildlife Hazards

Glacier provides a wonderful opportunity to view animals in their natural setting. Along with this opportunity comes a special obligation for park visitors. With just a little planning and forethought, visitors can help ensure the survival of a threatened or endangered species.

Always enjoy wildlife from the safety of your car or from a safe distance. Feeding, harassing, or molesting wildlife is strictly prohibited and subject to fine.

Bears, mountain lions, goats, deer, or any other species of wildlife can present a real and painful threat, especially females with young.

#### **Mountain Lions**

A glimpse of one of these magnificent cats would be a vacation highlight, but you need to take precautions to protect you and your children from an accidental encounter. Don't hike alone. Make noise to avoid surprising a lion and keep children close to you at all times. If you do encounter a lion, do not run. Talk calmly, stand tall, and back away. Unlike with bears, if attack seems imminent, act aggressively. Do not crouch and do not turn away. Lions may be scared away by being struck with rocks or sticks, or by being kicked or hit.

Lions are primarily nocturnal, but they have attacked in broad daylight. They rarely prey on humans, but such behavior occasionally does occur. Children and small adults are particularly vulnerable. Report all mountain lion encounters immediately!

#### Tick

Ticks are most active in spring and early summer. Several serious diseases, like Rocky Mountain Spotted Fever, can be transmitted. Completely remove attached ticks and disinfect the site. If rashes or lesions form around the bite, or if unexplained symptoms occur, consult a physician

#### **Rodents and Hantavirus**

Deer mice are frequent carriers of Hantavirus. The most likely source of infection is from rodent urine and droppings inhaled as aerosols or dust. Initial symptoms are almost identical to the onset of flu. If you have potentially been exposed and exhibit flu-like symptoms, you should seek medical care immediately.

Avoid rodent infested areas. Camp away from possible rodent burrows or shelters (unused buildings and woodpiles), and keep food in rodent-proof containers. To prevent the spread of dust in the air, spray the affected areas with a water and bleach solution (1½ cups bleach to one gallon of water).

#### **Medical Services**

If you are injured or suddenly become ill while visiting the parks, please contact a ranger for information and assistance.

#### **Montana Hospitals & Clinics**

- Northern Rockies Medical Center 802-2nd St. E., Cut Bank, MT 406-873-2251
- Kalispell Regional Medical Center 310 Sunny View Lane, Kalispell, MT 406-752-5111
- North Valley Hospital 1600 Hospital Way Whitefish, MT 406-863-3500
- Teton Medical Center
   915 4 NW, Choteau, MT
   406-466-5763

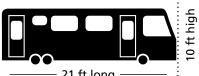
# Getting Around on the Going-to-the-Sun Road

#### **DRIVING THE GOING-TO-THE-SUN ROAD**

A drive across the park on the Going-to-the-Sun Road is a highlight of any visit This 50mile road combines both history and unparalleled scenery. While portions of the road remain open year-round, the higher sections only open after winter snows are plowed. Ongoing road rehabilitation work may cause delays of no more than 30 minutes total. Please allow additional driving time.

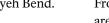
#### **VEHICLE SIZE RESTRICTIONS**

Length and width restrictions are in effect on the Going-to-the-Sun Road. Vehicles, and vehicle combinations, longer than 21 feet (including bumpers) or wider than 8 feet (including mirrors), are prohibited between Avalanche Campground and Rising Sun. Vehicles over 10 feet in height may have difficulty driving west from Logan Pass, due to rock overhangs. Stock trucks and trailers may access Packers Roost and Siyeh Bend.









Bicyclists must complying with all traffic regulations and must ride under control at all times. Keep to the right side of the road, ride in single file, and pull over if there are four or more vehicles behind you. During periods of low visibility or between sunset and sunrise, a white light or reflector visible from a distance of at least 500 feet in front and a red light or reflector visible from at least 200 feet to the rear must be exhibited on the operator or bicycle. The more visible you are, the safer you will be! Bicycles are prohibited on trails except the Apgar and Fish Creek Bike Paths, and the Flathead Ranger Station trail. Watch for falling rocks, drainage grates, debris, and ice on the road. You may encounter gravel surfaces in construction areas. Helmets are recommended.

#### **BICYCLING RESTRICTIONS**

From June 15 through Labor Day, the following sections of the Going-to-the-Sun Road are closed to bicycle use between 11:00am and 4:00pm:

- Eastbound and westbound from the Apgar turnoff to Sprague Creek Campground.
- Eastbound (up hill) from Logan Creek to Logan Pass.

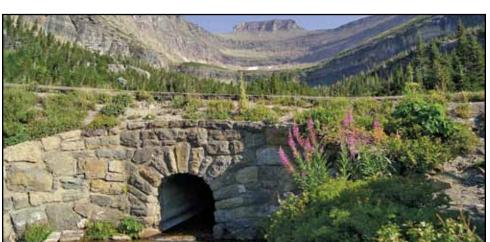
Allow 45 minutes to ride from Sprague Creek to Logan Creek and three hours from Logan Creek to Logan Pass. Roads are narrow; please ride safely.

## Traffic and Parking

During the busiest days of the summer many of the parking areas throughout the park will fill to capacity early in the day. This is especially true for Logan Pass and other locations along the Going-to-the-Sun Road.

Expect the Logan Pass parking lot to fill around 10:30am most mornings and remain full until mid-afternoon. The Avalanche Creek parking area and the small parking spots near St. Mary Falls and Sunrift Gorge fill everyday.

Many of the most popular locations are serviced by the Going-to-the-Sun Road Shuttle System. With a bit of pre-planning you will be able to visit these area without the hassle of finding a place to park your car.



The Going-to-the-Sun Road was constructed to blend with the landscape - Photo by David Restivo

## Glacier's Free Shuttle System - Park the Car and See the Park!



Glacier's free shuttle service provides access for visitors to locations along the Going-to-the-Sun Road and helps to reduce congestion during road rehabilitation work. This year the shuttle service starts July 1 and runs through September 3, 2012.

The Apgar Transit Center is the shuttle hub on the west side of the park. The first two shuttles of the day are express trips

straight to Logan Pass, without intermediate stops. They depart at 7:00am and 7:30am. Regular shuttle service for, all stops on the west side of the park, departs the Transit Center at 8:00am. Shuttles run approximately ever 30 minutes.

The St. Mary Visitor Center is the transit hub for the east side. East side shuttles begin service at the visitor center starting at

7:30am and depart every 40 to 60 minutes. Transfer points are located at Avalanche Creek and Logan Pass. Refer to the map on the opposite page for transit stop locations. You will need to transfer one, or possibly, two times to travel from one end of the route to the other. Signs on the shuttles indicate their destinations.

Information at the Apgar Transit Center and St. Mary Visitor Center will aid with trip planning and questions about the shuttle system. Maps at shuttle stops, and information in this paper, will also aid in planning your day's outing.

It is important to remember that the last shuttles leave Logan Pass at 7:00pm.

# Rebuilding the Going-to-the-Sun Road?

Last year over nine miles of road rehabilitation work was completed. Work between Logan Pit and the West Tunnel, as well as the entire stretch between Big Bend and Siyeh Bend was finished. The majority of the alpine section of the Going-to-the-Sun Road rehabilitation work is now complete.

This summer rehabilitation efforts switch to the sections of road between Avalanche Creek and Logan Pit and a little farther up the road the section between Haystack Creek and Big Bend.

While the exact date for the full opening of the upper section of the Going-tothe-Sun Road is dependant on weather

and plowing progress, it will not open any earlier than June 15, to allow for early season road work to resume. During the summer, travelers on the Going-to-the-Sun Road should expect short daytime delays, totaling no more than 30 minutes through the two construction areas (see map below). Night work closures will be rare but may occur between Avalanche Creek and Logan Pass, to allow for construction activities.

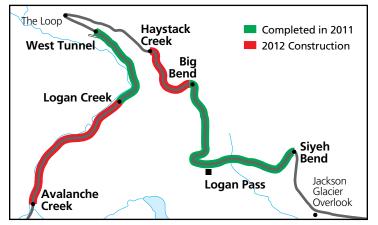
Prior to the road fully opening for vehicle traffic, hiker and bicycle travel may be restricted in construction areas along the Going-to-the-Sun Road. Signs will be posted to advise visitors of access and restrictions.



Visitors getting a close-up view of the historic road rehabilitation efforts - Photo by G. Noland



The Weeping Wall near Big Bend - Photo by David Restivo

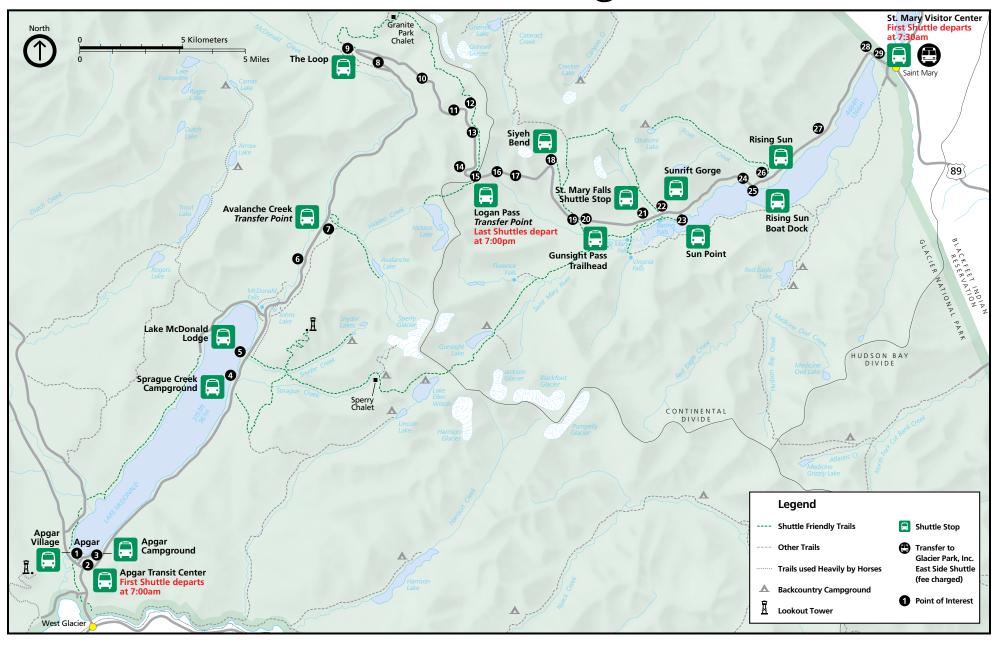


Construction zones on the Going-to-the-Sun Road for Summer 2012.

#### **Traffic Delays**

It's possible that you may experience a short construction delay along the Goingto-the-Sun Road. We encourage drivers to turn off their engines and set their emergency brakes during these short delays. Take this opportunity to enjoy the scenery, and fresh mountain air, on one of the most magnificent drives in the world. Please remain in your vehicle so that the flow of traffic can resume promptly.

# Points of Interest on the Going-to-the-Sun Road



#### **1** 🖪 Apgar Village

Lodges, gift shops, food service and the Apgar Visitor Center make Apgar the hub of activity on the west side of the park.

#### 2 🖪 Apgar Transit Center

The Apgar Transit Center is a new addition to Glacier. Constructed to mitigate congestion on the Going-to-the-Sun Road during road rehabilitation, it is the west side hub for the park's new transit system.

#### 😉 🖪 Apgar Campground

Apgar is the largest campground in the park and makes a great base camp for explorations of the west side of Glacier.

#### **4** Sprague Creek Campground

Get here early to obtain one of the sites right on the water. No towed units are permitted, making this a favorite of tent campers.

#### **⑤ ⑤** Lake McDonald Lodge

On the shores of Lake McDonald, the lodge is reminiscent of a Swiss chalet with a hunting lodge atmosphere. Boat tours and horseback rides depart from here



#### **6** McDonald Creek Overlook

McDonald Creek looks placid and calm for most of the summer, but early season visitors see a thundering torrent carrying trees and boulders.



#### **7** 🖪 Avalanche Creek

Explore the dense cedar-hemlock forest on the Trail of the Cedars Nature Trail, a hike to Avalanche Lake, a picnic, or by camping at one of the most popular sites in the park.

#### **3** West Tunnel

As you drive though the West Tunnel, imagine the time and manpower it took to bore through 192 feet of mountain using 1926 technology.

#### The Loop

This only switchback on the Going-to-the-Sun Road affords a scenic view of Heaven's Peak and an up-close look at the Trapper Fire of 2003 where it burned across the road. A strenuous, 4-mile hike to Granite Park Chalet begins here.

#### **®** Bird Woman Falls Overlook

Across the valley, Bird Woman Falls cascades 492 feet from the slopes of Mt. Oberlin.

#### **1** Weeping Wall

Roll up your windows as you pass the Weeping Wall. A gushing waterfall in spring, the flow reduces to a mere trickle in late summer and fall.

#### **②** Big Bend

One of the most spectacular views from the Going-to-the-Sun Road is at Big Bend. As its name suggests, this big bend in the road provides enough room to park and take in the views of Mt. Canon, Mt. Oberlin, Heavens Peak, and the Weeping Wall.

#### Triple Arches

This architectural and engineering marvel is best seen by eastbound travelers on the road.



#### Oberlin Bend

Oberlin Bend is just west of Logan Pass below cascading waterfalls of Mt. Oberlin. A short boardwalk offers astounding views of hanging valleys and the Going-to-the-Sun Road as it winds across the landscape below the Garden Wall. Don't be surprised if you see Mountain goats

#### 🕒 🖪 Logan Pass

Logan Pass sits on the Continental Divide at 6,646 feet. Alpine meadows filled with wild-flowers carpet the hillsides. Mountain goats and marmots are frequently seen along with the occasional grizzly bear. The popular Hidden Lake and Highline trails begin here.

#### **6** Lunch Creek

Surrounded by carpets of wildflowers in the summer, Lunch Creek flows down a natural rock staircase from the striking backdrop of Pollack Mountain

#### **1** East Tunnel

The East Side Tunnel was one of the most difficult challenges on the Going-to-the-Sun road. This 408-foot tunnel through Piegan Mountain often has waterfalls cascading down the portal.

#### 🔞 🖪 Siyeh Bend

Located at a prominent bend on the Goingto-the-Sun Road, the Siyeh Bend Shuttle Stop marks the transition between the higher elevation sub-alpine vegetation and the forests of the east side. Several great day hikes begin here.

#### 😉 🖪 Jackson Glacier Overlook

Stop here for the best view of a glacier from anywhere on the Going-to-the-Sun Road.



#### 🛮 🖪 Gunsight Pass Trailhead

Backpackers or physically-fit day hikers up for an all-day, strenuous adventure can ascend to the Continental Divide and gain access to glaciers, subalpine lakes, the historic Sperry Chalet, and many unparalleled mountainous vistas.

#### 

One of the most popular hikes in the park, is a 2.4 mile round trip which can be extended to 3.6 miles by continuing to Virginia Falls. The hike offers a short and pleasant stroll down to the valley floor, crossing the stream below the roaring St. Mary Falls.

#### ② ☐ Sunrift Gorge

A spectacular view of a water-carved gorge is just a short 75 foot walk. Look for dippers in the creek. These chunky, slate-grey birds are often sighted along rushing streams, foraging for aquatic insects.

#### 🕸 🖪 Sun Point

Explore the effects of water, wind, and ice on the 1.2 mile (one way) Sun Point Nature Trail. Spectacular views of St. Mary Lake and cascading Baring Falls are highlights. For a longer hike, continue on to St. Mary and Virginia Falls.



#### Wild Goose Island

This is one of the most frequently photographed spots in the park. Tiny Wild Goose Island offers a striking counter-point to the majestic peaks in the background.



#### Golden Staircase

This large pullout along Saint Mary Lake offers views of Saint Mary Lake as well as an opportunity to marvel at the skill of the builders of the Going-to-the-Sun Road.

#### 🕸 🖪 Rising Sun

The prairies meet the mountains at Rising Sun where spectacular sunrises sparkle across the surface of St. Mary Lake. Guided boat tours allow visitors to experience towering mountain peaks, from a perspective not available on the Going-to-the-Sun Road.

#### Two Dog Flats

This native grassland community provides habitat for a number of species. Hawks prey upon small mammals while songbirds forage on seeds and insects. Two Dog Flats supplies needed winter range for a large elk population.



#### **3** St. Mary Campground

St. Mary campground is the largest campground on the east side of Glacier National Park, and is conveniently located approximately one half mile from the St. Mary visitor center.

#### 🕸 🖪 St. Mary Visitor Center







"As part of a Canada-wide system of national parks, Waterton Lakes represents the southern Rocky Mountains natural region - "Where the Mountains Meet the Prairie."

Shaped by wind, fire, and water, Waterton remains for all time a place of spectacular natural beauty - a Canadian legacy of mountains, lakes, prairies, forests, alpine meadows and wildlife."

#### Scenic Drives and Attractions

#### THE ENTRANCE ROAD

These 8 kilometres (5 miles) provide magnificent views that beautifully illustrate the park's theme, "where the mountains meet the prairie."

Colourful prairie flowers and grasses, and the glittering blue chain of the Waterton Lakes are set against a mountain backdrop. The sight of the historic Prince of Wales Hotel National Historic Site, on a knoll above the lakes, indicates you will soon arrive at our lakeside community.

#### THE CHIEF MOUNTAIN HIGHWAY

The Chief Mountain Highway is the primary route between Waterton Lakes and Glacier national parks. From the border crossing, the road traverses fields and forests, dotted with wetlands created by Crooked Creek and marked by the 1998 Sofa Mountain Fire. It then descends to the grasslands near Maskinonge Lake, passing a viewpoint which gives a magnificent vista of the Front Range of the Rockies and Waterton Valley.

#### THE RED ROCK PARKWAY

Red Rock Parkway meanders over rolling prairie and through the Blakiston Valley. It ends at the strikingly coloured rocks and cascades of Red Rock Canyon, a distance of 15km (9 miles). The drive features views of magnificent mountains, including Mt. Blakiston, the park's highest peak.

#### THE AKAMINA PARKWAY

This route begins near the Townsite and runs for 16km (10 miles) along the Cameron Valley. Points of interest include the site of western Canada's first producing oil well, the Oil City site, and scenic Cameron Lake.

#### **CAMERON FALLS**

Located in the community, this picturesque waterfall is created as Cameron Creek falls into Waterton Valley.

#### THE BISON PADDOCK

The Bison Paddock, near the north entrance to the park off Highway 6, features a small herd of plains bison, maintained commemorate the larger herds that once roamed freely in this area. The bison can be seen while driving a narrow road through the paddock. Please do not leave



Heading into Waterton - Parks Canada photo

your vehicles. The road is not suitable for vehicles with trailers.

#### THE MASKINONGE LAKE

The park's diversity of habitats is home to a great variety of birds; over 250 species have been identified in Waterton. The Maskinonge area, located near the park entrance, is particularly rich in bird life.

#### WILDLIFE AND WILDFLOWERS

Bears, deer, elk, and bighorn sheep can be seen throughout the park, particularly in prairie areas. Sheep and deer frequent the townsite. Fall is probably the best time for wildlife watching. The larger animals come down from their summer ranges and waterfowl are on their migratory routes through the park.

Wildflowers can be seen in the park at almost any season except winter. In spring and early summer, prairie wildflower displays are particularly rich. In late summer, wildflowers continue to bloom at the higher elevations.

#### **Entrance Fees**

	DAILY	ANNUAL	NATIONAL
ADULT	\$7.80	\$39.20	\$67.70
SENIOR	\$6.80	\$34.30	\$57.90
YOUTH	\$3.90	\$19.60	\$33.30
FAMILY	\$19.60	\$98.10	\$136.40

# Camping and Hiking

Waterton's three campgrounds provide almost 400 campsites.

- The Townsite Campground has 238 sites, including 95 fully-serviced. Fees vary depending on the service provided. Fires permitted in picnic shelter stoves. All sites are reservable. Call 1-877-737-3783 or visit the website address below and follow the links.
- The Crandell Mountain Campground has 129 semi-serviced sites, and is located 6km up the Red Rock Parkway.
- Belly River Campground, located on the Chief Mountain Highway, has 24 unserviced sites. Reservations can be made in advance for the group sites at Belly River. Call (403) 859-2224 for information.

#### **BACKCOUNTRY CAMPING**

An overnight wilderness pass is mandatory and available from the Visitor Centre. A per-person fee is charged for those 16 years and older. Passes are issued up to 24 hours in advance on a first-come, first-served basis. Some wilderness sites will be available through advance reservations, according to established guidelines. Call (403) 859-5133.

A quota system for wilderness campground use and group size is applied to minimize impact on the land, and maximize your wilderness experience.

Waterton's nine designated wilderness campgrounds offer dry toilets and surface water supply. Some have facilities for horses.

#### HIKING THE TRAILS

There are 200km (120 miles) of trails in Waterton Lakes National Park. They range in difficulty from a short stroll to steep treks of several days duration. Trails are provided for a variety of users, including hikers, horse riders, and bicyclists. Watch for information signs at the trail head for the type of use permitted. Trails in Waterton also lead to extensive trail systems in Montana's Glacier National Park and in British Columbia's Akamina-Kishenina Provincial Park.



Carthew-Alderson Trail - Parks Canada photo



**Bighorn Sheep - Parks Canada photo** 

#### **Park Regulations**

Leave rocks, fossils, horns, antlers, wildflowers, nests, and other natural and historic objects undisturbed so that others may discover and enjoy them. Removal of such objects is subject to fines.

- It is unlawful to feed, entice, or touch park wildlife.
- Pets must remain on a leash at all times while in the park. Pets, on a leash, are allowed on trails in Waterton Lakes National Park.
- Camping is permitted only in designated areas, as marked by signs.
- Collection of dead or downed wood is not allowed.
- A national park fishing permit is required in Canada's national parks.
- Motorcyclists must wear a helmet.

#### Waterton Lakes National Park Services and Activities

#### Lodging

The Aspen Village Inn 1-888-859-8669 • Bayshore Inn & Convention Centre 1-888 527-9555 • Bear Mountain Motel 1-403-859-2366 • Crandell Mountain Lodge 1-866-859-2288

• Northland Lodge 1-403-859-2353, off-season 1-403-653-4275 • Prince of Wales Hotel - in Canada phone 1-403-859-2231; in U.S. 1-406 892-2525 • Waterton Glacier Suites 1-866-621-3330 • The Waterton Lakes Resort 1-888-985-6343

#### **Private Campgrounds**

- Crooked Creek Campground (403) 653-1100
- Great Canadian Barn Dance (403) 626-3407
- Payne Lake Campground (1-888-653-2522) • Waterton Springs Campground (403) 859-2247

#### **Other Services Include:**

• Clothing and gift shops, bookstores, movie rentals, liquor stores • a variety of cafes, restaurants, lounges and dining rooms • sporting supplies and hardware • service station • boat tours, bike and boat rentals • hiking tours, a horse riding facility • four churches • cash machines • art galleries • a movie theatre, health and recreation centre, 18-hole golf course, tennis court, ball diamond and playgrounds.

#### For Additional Information

the Waterton Lakes Visitor Centre Waterton Lakes National Park Waterton Park, Alberta T0K 2M0

Phone (403) 859-5133

or visit Waterton Lakes National Park online at: www.pc.gc.ca/waterton

#### A Sharing Place

When you think of the word, sharing, what comes to mind? From an ecological standpoint, the resources in Glacier are shared. Flowers divide and distribute seeds that propagate new flowers, nourishing grazing animals like deer, elk, and bighorn sheep. Coyotes, badgers, and hawks share hunting grounds in search of prey, where the two distinct communities of mountains and prairies meet. Scavengers find bounty left by predators. More recently humans have shared this land as well.

Before the establishment of a national park, this area was home to the Blackfeet, Salish, Pend d'Oreille, and Kootenai Tribes. The land gave them the gifts of plants and animals for subsistence purposes, and open areas for refuge, prayer, and fasting. When George Bird Grinnell discovered this "untouched" corner of northwest Montana he shared his adventures, and the beauty of the mountains and prairies, with readers in the eastern United States through articles in Field and Stream Magazine. After the Park's establishment, famous western artist Charlie Russell, often standing at the grand fireplace in Lake McDonald Lodge, shared his art and stories about Glacier National Park to the delight of intrigued first-time visitors.

Today, sharing Glacier National Park continues to be a daily occurrence. New technologies like smartphones and social media make it easier to share photos, videos, and day-to-day information. People who have never heard of Glacier National Park before, or those who desire to stay connected to Glacier, can simply log on to their Facebook page and see what the Park is sharing with them.

Let us share Glacier with you. Follow and "like" us today.

www.twitter.com/glaciernps

www.facebook.com/GlacierNationalPark

www.flickr.com/photos/glaciernps

www.youtube.com/glaciernps

www.nps.gov/glac/parknews/blogs.htm









# Keeping the Wild in Wildlife



**Bohemian Waxwing - Photo by David Restivo** 

Prairie, Rocky Mountain, and west coast plants all meet in Waterton-Glacier. Add in the effects of natural processes like fire, floods, and avalanches and you end up with a varied landscape which provides homes for many different species of animals.

This is also a meeting place for visitors from around the world! As a visitor here, take the time to learn about the wildlife and respect their need for undisturbed space. Although some animals spend part of the year close to roads and developed areas where they are easy to observe, enjoy viewing them at a distance. While some animals appear to tolerate people, approaching too close can disturb them from feeding areas or travel routes.

Keep at least 30 yards away from large animals and a minimum of 100 yards from bears. Use binoculars or a telephoto lens to improve your view. Keep the animal's line of travel or escape route clear and move away if wildlife approaches you.



Columbian ground squirrel - NPS photo



Whitetail fawn - Photo by David Restivo

"Animal jams" occur when many people stop along the road to view wildlife. In their excitement, some folks forget they need to be aware not only of safety concerns related to wildlife, but also traffic hazards. Slow down and pull over carefully. Remain in your vehicle, safe from wildlife and traffic, and move on in a short time so others can watch. If you are too close to an animal, on a hill, curve, or in heavy traffic, drive by slowly and avoid stopping.

Because park animals are still wild, they remain unpredictable, and may strike out with antlers, horns, teeth, hooves, or claws without warning. Animals may be hit by cars if they hang around parking lots and roads, and habituated animals often have to be relocated or killed.

How can you help? Enjoy wildlife from a distance and keep all food and garbage properly stored. We all share responsibility to keep the park healthy and wild.

Never feed park wildlife. If animals lose their fear of people, they become habituated, leading to begging and aggressive behavior.



**Bull moose - Photo by Bill Hayden** 



### Preserving Glacier's Native Fish strongholds in the North Fork Flathead

Glacier National Park is as water-rich physical landscape, home to a broad diversity of native aquatic species. However, this biodiversity is becoming increasingly threatened by the presence of non-native species. Historically, non-native fish were planted intentionally to "enhance" fishing opportunities for the visiting public. Some fish were planted into waterways that already supported native fish, while others were planted into fishless lakes. Ecosystem impacts and responses varied. In once fishless lakes, native zooplankton and amphibian communities can become altered as a result of fish introduction. Hybridization, predation, and competition for food and space resulted between native and non-native species and in some cases, native fish populations have been severely damaged. In a number of large lakes on the west side of the park, non-native lake trout have replaced native bull trout as the top level aquatic predator in the short span of only 30 years. Rainbow trout are moving into westslope cutthroat trout

River and hybridizing with them, increasing competition with native trout and harming the native species. Non-native brook trout are present in some stream systems in the Middle Fork Flathead River drainage in the park, where they hybridize with native bull trout and compete with native westslope cutthroat trout.

Glacier's response to these aquatic threats involves a three-pronged approach. First, the park is attempting to conserve intact population strongholds for native fish by constructing fish passage barriers on some park streams to prevent or limit the expansion of non-native fish into new areas. Second, the park and its primary research partner, the U.S. Geological Survey is experimenting with lake trout control through suppression on Quartz Lake, where lake trout appear to be a recent invader. The intent is to reduce lake trout numbers (and keep them there) to a point where they don't overwhelm or negatively impact the native fish populations. Third, evaluate options for restoring severely altered aquatic systems. This could involve larger-scale efforts to remove non-native fish from native fish habitat, expansion of threatened native fish populations into more secure areas, or removing fish alltogether from some bodies of water. Glacier's native aquatic systems are some of the jewels in the Crown of the Continent Ecosystem, and thoughtful stewardship will be required to keep them secure for future generations to enjoy.



Michael's first Westslope Cutthroat Trout - Photo by Chris Downs

# Glacier Association

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The Glacier Association is a nonprofit 501c3 cooperating association of the National Park Service and an officially recognized partner of Glacier National Park. Glacier Association helps to support

the park's educational, interpretive, cultural and scientific programming needs with aid generated by sales at bookstores in visitor centers and ranger stations

throughout the Park, as well as sales from its internet bookstore.

The Glacier Association offers a variety of merchandise including books, guides, maps, and DVD's which promotes a better understanding of the park's diversity of landscapes, animal and plant life, culture, and history. Our annual membership program offers a variety of categories which feature a 15% discount on merchandise

at all Glacier Association locations and at other cooperating associations throughout the country.

#### **Glacier Association**

PO Box 310 West Glacier, MT 59936 406-888-5756 gnha@glacierassociation.org

**Visit the Association Bookstore at:** 

www.glacierassociation.org



Glacier Association headquarters at the historic train depot in West Glacier, MT - NPS Photo

#### **Suggested Guides & Maps to Glacier National Park**

Hikers Package ...... \$22.95\*

A \$29.00 Value. 20% Savings!

The Hikers Guide gives you Glacier National Park trail dynamics, like distance and difficulty, while providing trail head descriptions and location maps. The Trails Illustrated Topo map is a detailed layout of all the trail systems in Glacier and Waterton Lakes National Parks.

The Glacier Nature Guide will help you once you get there to identify what you see along your way. A great starter package!!!

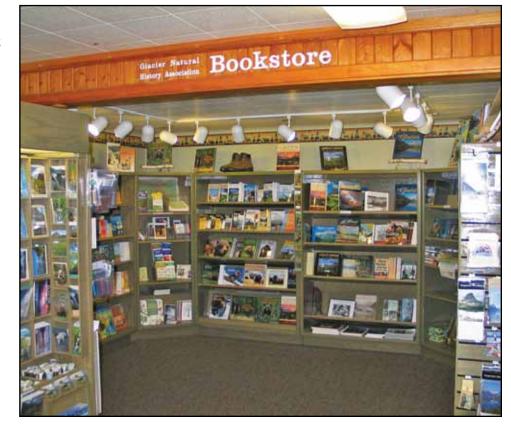
#### Backcountry Users Package......\$36.95\*

A \$48.00 value! Includes: Hiking Glacier and Waterton Lakes National Parks, Trails Illustrated Topo Map, Bear Aware, New Wilderness First Aid - 3rd Edition, and the Glacier Nature Guide.

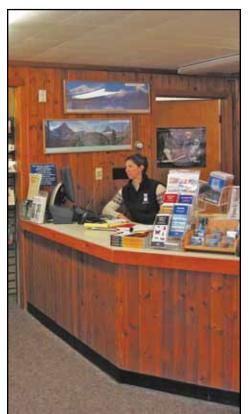
#### Travelers Package ......\$32.95\*

A \$42.00 value. Everything you need to prepare yourself for the splendor of Glacier National Park. Includes: GLACIER-The Story Behind the Scenery, Glacier Handbook, and the National Geographic Trails Illustrated map to Glacier and Waterton Lakes National Parks.

\*Shipping is additional, please contact the Glacier Association for pricing. All titles in these packages are available individually.



Apgar Visitor Center Bookstore - Photos by David Restivo





Students at Grinnell Glacier Overlook just off the Highline Trail - Photo by Glacier Institute

# The Glacier Institute www.glacierinstitute.org

Our classrooms are the mountain trails and vast river basins that are home to more than 1,200 species of native plants, 240 species of birds and 65 species of native mammals. Our instructors are recognized experts in their fields, published authors, wildlife biologists, college professors, naturalists and teachers. We host one, two and three-day outdoor workshops and youth camps that immerse our participants in this stunning and stimulating environment. Kids can join a Glacier Institute naturalist for a hands-on, six hour *Youth Adventure Series* course, full of fun and discovery while adults can enjoy a day on their own. Programs are \$50.00 per child. Add a second or third program, for the same child, at \$45.00 per additional program.

Please join us for a learning adventure you will never forget.

#### The Glacier Institute, P.O.Box 1887, Kalispell, MT 59903

Phone: 406-755-1211 • Fax: 406-755-7154 • Email: register@glacierinstitute.org • Website: www.glacierinstitute.org Follow us on Facebook at: The Glacier Institute

<b>Popular</b>	Summer Courses*	
June 8	Spring Wildflowers	\$65.00
June 13	Glacier Through a Naturalist's Eyes	\$75.00
June 15	Orchids: Glacier's Precious Beauties	\$65.00
June 21-22	Landscapes in Watercolor	\$175.00
June 22	The Uncommon Loon	\$65.00
June 23-24	Summer Mushrooms and Lichens	\$170.00
June 24	Wild Medicinal Herbs	\$65.00
June 25	Making Wild Herbal Medicines	\$65.00
June 27	Railroad History	\$100.00
July 6	Glacier's Grizzlies and Black Bears	\$75.00
July 7-8	Glacier's Grizzlies	\$230.00
July 8-10	Nature Photography in Glacier	\$245.00
July 11-13	Writing on the Wild Side	\$275.00
July 15	Glaciers and Glacial Geology	\$65.00
Jul 16-17	North Fork River Ecology by Raft	\$450.00
uly 18-21	Photography in Glacier Country	\$400.00
luly 23	Wolverines of Glacier	\$65.00
uly 24	Goats of Glacier	\$65.00
uly 26	Middle Fork River Ecology by Raft	\$125.00
luly 27-29	Geology of Glacier National Park	\$325.00
July 29	Wildflower Wanderings	\$65.00
July 31	McDonald Creek by Snorkel	\$110.00
August 1	Family Photography: Kids with Cameras	\$65.00
August 3	Beavers: The Best Dam Habitat Builders	\$65.00
August 6-7	Melting Glaciers and Climate Change	\$170.00
August 8	Railroad History	\$100.00
August 10	Geology Along the Highline	\$65.00
August 25-26	Edible and Useful Plants	\$170.00
Sept. 5	Geology Along the Highline	\$65.00
Sept. 18-19	Inspired by Glacier: Writing Workshop	\$170.00
Sept. 21	Autumn in Glacier	\$65.00
Sept. 22	Hawk and Eagle Migration	\$65.00
Sept. 29-30	Heralds of Fall: Ecology of Elk	\$170.00

Just for Kias	: Youth Adventure S	series *
June 29 & July 27	Wilderness Skills	\$50.00
July 6 & August 3	Predators & Prey	\$50.00
July 13 & August 10	Fire in the Forest	\$50.00

\*This is a sample of the courses we offer. Please check our website for a complete course calendar. www.glacierinstitute.org



# Glacier National Park Associates

#### WHO WE ARE

The Glacier National Park Associates (GNPA) is an all-volunteer, nonprofit organization that assists with trail work, historic log structure preservation and other projects that the park does not have adequate funding to complete. Volunteers complete a number of major projects yearly, often involving several days in the backcountry.



NPS Photo

#### WHAT WE DO

The Associates manage a Backcountry Ranger Intern Fund and sponsor a young backcountry ranger intern who works for 12 weeks in the park's backcountry.

The Associates also manage a Backcountry Preservation Fund. Contributions from backcountry users purchase supplies and materials ranging from bear-proof boxes to computer programs related to hiking and camping in the backcountry.

Each spring we sponsor a Volunteer Day in Glacier Park. We clear trails, paint, peel logs for historic building restoration, and transplant seedlings in the nursery. This year's projects included helping to clear various trails, working in the park's Native Plant Nursery, planting trees, shrubs, and wildflowers from the nursery in disturbed areas of the park and helping refurbish buildings near the park headquarters.

GNPA is instrumental in the expansion of the hours of the Discovery Cabin in Apgar. Volunteers are coordinated by GNPA and funds are provided to help defray administrative costs.

GNPA funds two internships with the Glacier National Park Native Plant Nursery. Each year a stipend is provided for a high school student from Columbia Falls for work in the nursery.

GNPA projects do not conclude at the end of summer. On the fourth Monday of January, February, and March, GNPA members sponsor a speaker series. These free presentations by biologists, geologists, historians help us be more informed of the past, present and future of beautiful Glacier National Park.

#### JOIN US!

Become a member and help us support Glacier National Park. You can contact the Glacier National Park Associates at:

Glacier National Park Associates P. O. Box 91, Kalispell, MT 59903 406-250-4745

www. glacier national park associates. or g



Volunteering in the Nursery - Photo by Joyce Lapp



Glacier National Park Trail Work - NPS Photo



**Backcountry Cabin - Photo by David Restivo** 



Glacier National Park Trail Work - NPS Photo



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Apgar	Lodging	Village Inn Motel Apgar Village Lodge	May 31 - Sept. 17 May 25 - Sept. 29	Call 406-892-2525 for advance reservations or 406-888-5632 for same day reservations Call 406-888-5484 for reservations
	Food Service	Eddie's Restaurant	May 25 - Sept.	Breakfast, lunch, and dinner
	Campstore/Gift Shops	Eddie's Campstore The Cedar Tree Schoolhouse Gifts Montana House	May 1 - Sept. May 25 - late-Sept. mid-May - mid-Oct. Open all year	
	Horseback Rides	Apgar Corral	May 26 - Sept. 3	Call local 406-387-4405 or toll free 1-877-888-5557 for schedule and information
	Boat Rentals	Glacier Park Boat Co.	June 2 - Sept. 3	Small boat rentals including rowboats, canoes, single and double kayaks, and 8hp & 10hp motors. June and September hours are 10 am to 6 pm. July and August hours are 9am to 7pm.
Lake McDonald	Lodging	Lake McDonald Lodge	May 19 - Sept. 23	Call 406-892-2525 for advance reservations or 406-888-5431 for same day reservations
WicDonald	Food Service	Russell's Fireside Dining Room	May 19 - Sept. 23	Lake McDonald Lodge - breakfast, lunch, and dinner
		Jammer Joe's Grill & Pizzaria	June 23 - Sept. 3	Lunch and dinner
		Lucke's Lounge	May 19 - Sept. 23	Lake McDonald Lodge - 11:30am to midnight
	Campstore/Gift Shops	Lodge Campstore Lodge Gift Shop	May 19 - Sept. 23 May 19 - Sept. 23	Groceries, fishing and camping supplies, firewood, and gifts Lake McDonald Lodge
	Scenic Boat Tours	Glacier Park Boat Co.	May 19 - Sept. 23	Narrated tours of Lake McDonald - 1 hour. Daily tours at 11:00am, 1:30pm, 3:00pm, 5:30pm, and 7:00pm. After Labor Day 1:30pm, 3:00pm, and 5:30pm tours only. Rowboat and motorboat rentals available 10:00am to 7:00pm daily. After Labor Day boat rentals available 1:00pm to 6:00pm. Call 406-257-2426 for details.
	Horseback Rides	Lake McDonald Corral	June 2 - Sept. 30	Call local 406-387-4405 or toll free 1-877-888-5557 for schedule and information
Many Glacier	Lodging	Many Glacier Hotel Swiftcurrent Motor Inn	June 15 - Sept. 23 June 8 - Sept. 16	Call 406-892-2525 for advance reservations or 406-732-4411 for same day reservations Call 406-892-2525 for advance reservations or 406-732-5531 for same day reservations
	Food Service	Ptarmigan Dining Room Swiss Lounge Italian Garden Ristorante	June 15 - Sept. 23 June 15 - Sept. 23 June 8 - Sept. 16	Many Glacier Hotel - breakfast, lunch, and dinner Many Glacier Hotel - 11:30am to midnight Swiftcurrent Motor Inn - Breakfast, lunch, and dinner
	Campstore/Gift Shops	Swiftcurrent Campstore Hotel Gift Shop	June 8 - Sept. 23 June 15 - Sept. 23	Groceries, fishing and camping supplies, firewood, and gifts Many Glacier Hotel
	Scenic Boat Tours	Glacier Park Boat Co.	June 15 - Sept. 16	Narrated tours of Swiftcurrent and Josephine Lakes - 1 hour and 30 minutes. Daily tours at 9:00am, 11:00am, 2:00pm, and 4:30pm in June. Additional tours at 1:00pm and 3:00pm begin July 1st through Labor Day. Optiona guided walks to Grinnell Lake included on the 9:00am and 2:00pm tours. An 8:30am tour with a guided hike to Grinnell Glacier begins mid July, trail conditions permitting. Boat rentals available from 8:30am to 7:00pm – rowboats, canoes, and kayaks. Call 406-257-2426 for details.
	Horseback Rides	Many Glacier Corral	June 16 - Sept. 16	Call local 406-387-4405 or toll free 1-877-888-5557 for schedule and information
	Laundry and Showers	Swiftcurrent Motor Inn	June 8 - Sept. 16	Purchase tokens at the campstore or front desk
Rising	Lodging	Rising Sun Motor Inn	June 17 - Sept. 16	Call 406-892-2525 for advance reservations or 406-732-5523 for same day reservations
Sun	Food Service	Two Dog Flats Grill	June 17 - Sept. 16	Breakfast, lunch, and dinner
	Campstore/Gift Shops	Rising Sun Motor Inn	June 17 - Sept. 16	Groceries, fishing and camping supplies, firewood, and gifts
	Scenic Boat Tours	Glacier Park Boat Co.	June 17 - Sept. 3	Narrated tours of St. Mary Lake - 1 hour and 30 minutes. Daily tours at 10:00am, 12:00pm, 2:00pm, 4:00pm, an a 1 hour tour at 6:30pm. Optional guided walks to St. Mary Falls included on the 10:00am and 2:00pm tours. Ca 406-257-2426 for details.
	Showers	Rising Sun Motor Inn	June 17 - Sept. 16	Purchase tokens at the campstore or front desk
Two	Campstore/Gift Shops	Two Medicine Campstore	May 25 - Sept. 3	Gifts, self-serve convenience food, groceries, fishing tackle, camping supplies, and firewood
Medicine	Scenic Boat Tours	Glacier Park Boat Co.	June 9 - Sept. 9	Narrated tours of Two Medicine Lake - 45 minutes. Daily tours at 10:30am, 1:00pm, 3:00pm, and 5:00pm. Additional tour at 9:00am begins July 1st. Optional guided walks to Twin Falls included on the 1:00pm and 3:00pm tours. Boat rentals available from 8:00am to 8:00pm - rowboats, canoes, kayaks, and electric motor boat Call 406-257-2426 for details.
Waterton/ Goat Haunt	Scenic Boat Tours	Waterton Inter-Nation Shoreline Cruise Co.	May 5 - Oct. 7	Boat cruises and transport service between Waterton Townsite (Canada) and Goat Haunt (USA). Daily lake tours May 5 - Oct. 7; Landings at Goat Haunt June 2 -September 23. Call for more information. 403-859-2362
Other Services	Backcountry Lodging (only accessible by trail - reservations are required)	Belton Chalets, Inc. •Granite Park Chalet •Sperry Chalet	July 1 - Sept. 9 July 19 - Sept. 9	Granite Park Chalet provides rustic accommodations that include rooms, beds, and a common kitchen. Guests provide their own sleeping bag, water, food, and cooking utensils. Optional bed linen service is available. Sperry Chalet offers full service rustic overnight accommodations and full meal service, in a wilderness setting.  For reservations at either Granite Park or Sperry Chalets, call 1-888-345-2649. You may also visit their websites at www.graniteparkchalet.com and www.sperrychalet.com.
	Backpacking & Hiking	Glacier Guides, Inc.	May - Oct.	Guided day hikes and backpacking trips into Glacier's backcountry for one to seven days - custom guide service trips available - Camping equipment available for rent at their West Glacier office Call 406-387-5555 or 800-521-RAFT for reservations and information - http://www.glacierguides.com
	Bus Tours	Sun Tours	May 15 - Oct. 15	Interpretive tours highlighting Blackfeet culture and history relating to Glacier National Park's natural features. Tours begin from Browning, East Glacier, St. Mary, Rising Sun, Apgar, and West Glacier. Call 1-800-786-9220 or 406-226-9220 for reservations and information
		Glacier Park, Inc.	May 19 - Sept. 30	Red Bus tours between park lodges as well as Two Medicine, East Glacier, West Glacier, Waterton, and St. Mary Call 406-892-2525 for reservations and schedule information
	Shuttle Service  The Glacier Park Inc. shut	Glacier Park, Inc., East Side Shuttle Hiker Shuttle tles are a fee based system, assistir	June 8 - Sept. 23 July 1 - Sept. 3 ng visitors on the east side	Daily shuttle service between the Prince of Wales Hotel in Waterton Lakes National Park in Canada and Many Glacier, St. Mary, Cut Bank Junction, Two Medicine, and East Glacier. The hiker shuttle between Many Glacier and St. Mary connects to the free NPS Going-to-the-Sun Road shuttle at the St. Mary Visitor Center. of the park in connecting with the free NPS Going-to-the-Sun Road Shuttle and with other east side destinations.
	Cash Machines	tles are a fee based system, assistir	ng visitors on the east side	

#### Worship Services

Interdenominational and Roman Catholic services are held in campground amphitheaters and other locations within the park. For a listing of times and locations please consult a ranger in the campground or at one of the park visitor centers.



### Climate Change in the Crown of the Continent

Climate change is one of the most pressing issues of our time. The impacts of a rapidly warming world may affect every aspect of life on earth. As the earth's temperature continues to rise, many plant and animal species increasingly face rapid adaptation, migration, or even extinction. Our national parks demonstrate how warming temperatures are changing the environment and may provide a refuge for plant and animal species. They help us to understand the extent of climate change, how to mitigate its effects, and how to protect our natural and cultural treasures for the enjoyment of our children and grandchildren.

Glaciers are responsible for the sculpted peaks, hanging valleys, and azure lakes that inspire park visitors. However, glaciers provide much more than scenery. They are an integral part of the ecosystem, especially during dry periods and pouring cold water into thirsty streams during the hottest days. In 1850, there were an estimated 150 glaciers in the parks. Today there are 25, all in Glacier. Scientists predict (at current rates of warming) these remaining glaciers will disappear by 2020.

Mountain snowpack has also declined as a result of warming temperatures. Due to changing precipitation and seasonal patterns, snow is often replaced with rain resulting in earlier spring runoff and a decrease in water availability in



Grizzly - NPS photo

dry months. This will mean a greater flood potential, and an increase in water temperature in aquatic ecosystems. This trend is expected to have major consequences for aquatic species.

One population of bull trout migrates more than 100 miles from Flathead Lake to spawning streams in Canada. All bull trout require clear, cold water and clean gravel-bottom streams to reproduce and survive, The Crown of the Continent is one of bull trout's last strongholds, especially in Glacier, Montana's Swan Valley, and the transboundary Wigwam and Flathead rivers. Scientists are concerned about the ability of bull trout to survive the long-term impacts of climate change.

Alpine meadows are expected to change rapidly over the next several decades. These high altitude meadows provide habitat for an incredible array of rare species such as pika, mountain goats, and grizzly bears. In addition to less water

availability in alpine meadows, the longer growing season is allowing treeline to climb in elevation, decreasing the alpine habitat these species depend on.

Grizzly bears and other wildlife freely traverse multiple ownerships and the international border. The transboundary North Fork Flathead Valley is a critical wildlife corridor. British Columbia and Montana have taken the initial steps to ban mining and gas drilling, in an attempt to preserve vital ancient wildlife pathways. As the climate warms and plant communities change, animals need the freedom to roam in search of suitable habitat.

While some impacts of climate change are inevitable, park managers work with neighboring communities and agencies to give fish and wildlife a better chance to adapt. Fortunately, Waterton-Glacier International Peace Park lies at the core of the greater Crown of the Continent ecosystem in Alberta, British Columbia and Montana, a place where animals can still move freely across borders.

The region's natural diversity of species and habitats helps buffer the impacts of rapid change. Scientists have developed guiding principles to promote resiliency to warming climate.



Pika - NPS photo



Bull Trout - NPS photo



Jone's Columbine - NPS photo



Looking north to Canada up Waterton Lake - David Restivo

### Glacier and Waterton Take a Closer Look at Bats

Imagine looking for fist-sized animals that fly only at night, roost during the day in the darkest hiding places they can find, and make sounds that are inaudible to the human ear. Then imagine doing this at night in the rugged, mountainous terrain of Waterton-Glacier International Peace Park, and you realize the exciting challenge Glacier's wildlife personnel encountered last July when they initiated a two-year bat inventory and monitoring study. Why study bats? Bats are an integral part of the park's ecosystem. They play critical roles in controlling insects such as mosquitoes and spruce bud worm, which is responsible for



Little brown bat; close-up of nose with fungus, New York, Oct. 2008 Photo courtesy Ryan von Linden/New York Department of Environmental Conservation

many of the red-needled, dead or dying trees along the Going-to-the-Sun Road above Rising Sun and other places. It is estimated that the U.S. agricultural industry saves up to \$53 billion a year because of the thousands of tons of insects bats eat every night. Bats also provide food as a prey species for other animals such as hawks and ow The loss of our bat populations would cause a rippling effect throughout our ecosystem.

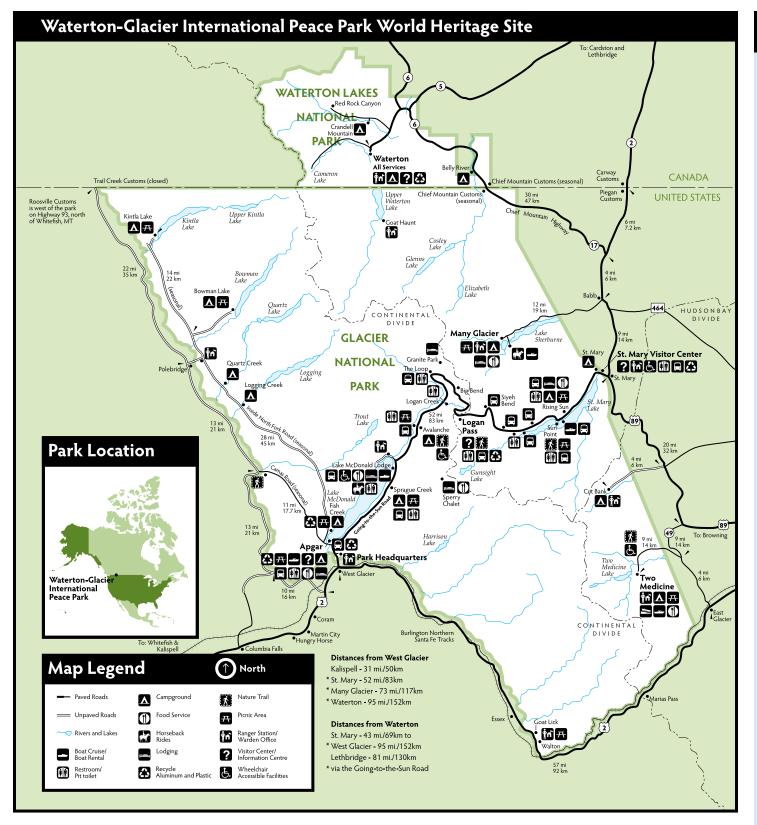
Prior to 2011, formal bat surveys had never been conducted in the park and, as a result, our knowledge of bats in Waterton-Glacier was nearly nonexistent. Recent developments, however, have made learning about our bats critical. Bat populations are threatened by wind energy, for example. Not all bats hibernate, but migrate instead to survive the winter. Wind farms with the wrong design or in the wrong location are deadly for migrating bats.

Of even greater threat is a new disease called White-nose Syndrome (WNS), which is decimating hibernating bats in eastern North America. The disease is called White-nose Syndrome because

of the white fungus that grows on the noses and wings of affected bats. Since its discovery in a New York cave in 2006, WNS has caused the death of over 5.7 million bats of nine different species and has spread to 20 states and 4 Canadian provinces. The disease is expected to spread west. According to biologists, WNS has caused "the most precipitous wildlife decline in the past century in North America." Bats infected with WNS suffer from serious metabolic imbalances and wake more often during hibernation, causing them to deplete essential fat reserves needed to survive the winter. Infected bats also emerge too soon and can be seen flying around in wintertime. These bats usually freeze or starve to death.

Right now the only way to slow the spread of WNS is to close caves and mines. You can help stop the spread of WNS by honoring cave closures and permit procedures, educating your friends and coworkers about WNS (www.batcon.org), reporting any late winter bat activity or unexplained bat deaths to biologists, and following updated disinfection protocols before entering caves (http://www.fws.gov).

If you find yourself outside in the park around dusk this summer, you may see signs along trails alerting visitors to bat surveys in the immediate area. In cooperation with a renowned Canadian bat biologist, Glacier's biologists use mist netting and acoustic techniques to detect and study bats. Mist netting allows us to collect baseline data on species-specific acoustics, body size, age, gender, reproductive status, and genetics. Most importantly, netting allows us to assess bats for signs of WNS. Thus far, no signs of WNS have been detected. Secondarily, we use acoustic techniques to detect highflying bat species and determine which bats overwinter in the park and which migrate elsewhere. The immediate goal of the project is to inventory bat species and their habitats in the park. Thus far, we have learned that nine bat species live in Waterton-Glacier International Peace Park. Our long-term goal is to establish a monitoring program to better understand the possible impacts to bats from WNS, in case the disease comes to Glacier. The study was made possible by the generous support of the Glacier National Park Fund.





The "International" about to dock at Goat Haunt - David Restivo

### **Border Crossing Dates and Times**

...open 24 hours west of the park on Highway 93, north of Whitefish, MT and south of Fernie, B.C.

Piegan/Carway ...... ...........7 a.m. to 11p.m. east of the park at the joining of U.S. Highway 89 with Alberta Highway 2

#### Chief Mountain

5/15 to 5/31...... ..9:00 a.m. to 6:00 p.m. 6/1 to 9/3.....7:00 a.m. to 10:00 p.m. 9/4 to 9/30.....9:00 a.m. to 6:00 p.m. October 1..... ... closed for season

#### **Crossing the Border**

All travelers crossing the border must present documents that are Western Hemisphere Travel Initiative (WHTI) compliant. Those documents include:

- U.S. Citizens must present a U.S. Passport, Enhanced Drivers License\*, U.S. Passport Card, or NEXUS Card
- · U.S. Resident Aliens must present a U.S. Resident Alien Card
- · Canadian citizen must present a Canadian Passport, Enhanced Drivers License\*, or NEXUS Card
- · Citizens from countries other than Canada or the United States must present a valid passport and a current I-94 or an I-94W.
- I-94 forms are available at the Port of Entry for \$6.00 U.S. currency and all major credit cards are accepted. Canadian currency is not accepted.
- For a list of States and Provinces who currently issue Enhanced Drivers Licenses, please visit www.getyouhome.gov/ html/EDL\_map.html

Special restrictions apply when crossing the border with pets, defensive sprays, alcohol, firewood, and purchases. All firearms must be declared. For more information on crossing from the USA to Canada, call 1-800-320-0063; and if crossing from Canada to the USA, call 1-406-889-3865.

#### Travel To, From, and Through **Goat Haunt**

Travel between Waterton Lakes National Park, Canada and the Goat Haunt Ranger Station, either by boat or by foot on the Waterton Lake Trail, will require an official government issued photo identification card for U.S. or Canadian citizens or permanent residents. All others must carry a valid passport.

Persons seeking to travel beyond the Goat Haunt Ranger Station into the United States must present documents that are Western Hemisphere Travel Initiative compliant.

The Goat Haunt Port of Entry will operate between 10:30 a.m., and 5:00 p.m. No entry into the United States past the Goat Haunt Ranger Station will be authorized outside of the port's hours of operation. Hikers traveling northbound into Canada from the United States are required to contact the Chief Mountain Port of Entry upon their arrival at the Waterton townsite. Information on contacting the Port of Entry is available at the Waterton Lakes Visitor Centre or the Waterton Station of the Royal Canadian Mounted Police.

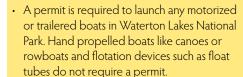
#### **Boat Permit Regulations** Glacier



- Motorized boats and trailered watercraft, such A full inspection will be required for e as sailboats, will need an NPS AIS inspection and launch permit. Other watercraft will need a self-certification form (available at ranger stations, visitor centers, backcountry permit offices, and at many boat launches). The signed form should be kept on the boaters person or in the vessel
- Between Memorial Day and Labor Day, permits will be available 7:00 a.m. to 7:00 p.m. at Park Headquarters, in West Glacier. Permits are also available, between 8:00 a.m. to 4:30 p.m., at the St. Mary Visitor Center, and the Two Medicine and Many Glacier Ranger Stations. Boaters headed to the North Fork should obtain permits at Park Headquarters. Boaters planning on early morning or late evening trips need to plan accordingly.
- A new permit will be required upon each entry into the park. A boat may launch multiple times provided the boat does not leave the park between launches.

- permit. Inspections may take upwards of 30 minutes. Boaters should plan on additional time for inspections.
- · To qualify for a permit, boats must be clean, drained and thoroughly dry (including bilge areas and livewells) on inspection.
- Boats with internal ballast tanks or other enclosed compartments that exchange water with the environment, that cannot be readily opened and fully inspected are prohibited within Glacier National Park.
- Boats that fail to pass the inspection will be denied a permit. Boaters may re-apply for a permit after the boat is thoroughly cleaned, drained and dried.
- Boats found with certain infestations of aquatic invasive species may be quarantined until they can be fully decontaminated. Depending on the infestation, this may take up to 30 days.
- Boaters on Waterton Lake must comply with permit and inspection requirements of Waterton Lakes National Park

#### **Boat Permit Regulations** Waterton Lakes



- To obtain the permit you will be asked a few short questions to ensure that the boat has not been in waters where invasive mussels are present.
- Gate staff are required to stop all vehicles towing boats to ensure that they have a permit, or to provide a permit if they do not
- The permits are free and are available at the park gate, the visitor centre, the administration office, and campground kiosks. The permit must be carried on your person while boating in the park. The permits are valid for the entire season as long as the boat has not been launched in any waters where invasive mussels are thought to be present.



- concern, then a free boat inspection is required prior to issuing a permit to ensure that the boat does not carry any invasive species.
- · If the inspection indicates the boat is contaminated, then it will not be permitted to launch and must be decontaminated and re-inspected before a permit will be issued.
- Boats with internal ballast tanks that have been operated in waters of concern will not be permitted to launch.



Quagga mussel encrusted motor NPS Photo